# TECHNICAL REVIEW AND EVALUATION OF APPLICATION FOR AIR QUALITY PERMIT No. 87288

#### I. INTRODUCTION

This Class II synthetic minor renewal permit is for the continued operation of United States Marine Corps's Marine Corps Air Station – Yuma (NAICS Code 481). Permit No. 87288 renews and supersedes Permit No. 63582.

## **A.** Company Information

Facility Name: Marine Corps Air Station – Yuma (NAICS Code 481)

Mailing Address: Environmental Department, P. O. Box 99110, Yuma, Arizona

85369-9110

Facility Location: N32° 39' 40.0"/W114° 35' 11.0"/213 ft MSL

## **B.** Attainment Classification

This facility is located in the non-attainment area for Particulate Matter with an aerodynamic diameter of less than 10 microns ( $PM_{10}$ ). This area is designated as attainment for all other criteria pollutants.

## C. Background

The Marine Corps Air Station – Yuma (MCSA Yuma) is located in the southeast portion of the City of Yuma. The facility was established in 1959, and has held air quality permits since 1993. EPA, through a guidance document issued in August 1996, has allowed the Department of Defense (DOD) to divide installations according to common control for different military services. EPA has also given discretion to local agencies to divide military facilities into multiple stationary sources based on Standard Industrial Classification (SIC)/North American Industry Classification System (NAICS) codes. MCAS and ADEQ have agreed to apply this policy to MCAS Yuma facility. MCAS Yuma had divided its operations under 19 different NAICS codes. This renewal permit covers NAICS Code 481 – Air Transportation.

It should be noted that the policy referenced above only applies to the evaluation of criteria pollutants. In accordance with 40 CFR Part 63, major source applicability determination for hazardous air pollutants (HAPs) is not dependent on SIC code distinction. HAP emissions will have to be evaluated cumulatively to the extent that the emission activities are contiguous or adjacent and the operations are under 'common control'. In the case of MCAS, the HAP emissions are to be evaluated on a facility wide basis.

#### II. PROCESS DESCRIPTION

## A. Process Description

MCAS Yuma is a complex facility with multiple land uses, processes and activities similar to those found in a small city. The main station consists of an airfield with runways, taxiways, parking aprons, hangars, and operations and training buildings. There are also family and bachelor quarters as well as personnel support facilities such as child care center, youth facility, commissary, exchange, club, bowling alley, theatre, gym, chapel, medical/dental, and social services. A drinking water treatment plant is located along Avenue 3E and adjacent to family housing. The southern portion of the station consists of munitions storage areas, Combat Arms Loading Area (CALA), and out-leased land used for agricultural practices.

Currently MCSA Yuma is the primary aviation training base in the Marine Corps. MCSA Yuma operates the airport facility as a joint military/civilian airport. The air station is one of the largest single contributors to the economy of Yuma County. The mission of MCAS Yuma is to support 80 percent of the Marine Corps' air-to-ground aviation training. Each year, the air station hosts approximately 100 transient aviation units assigned to the Atlantic and Pacific Fleet Marine Forces and units from the Navy as well as other U.S. and NATO forces. This training results in an annual transient influx of 41,000 personnel and 600 aircraft at MCAS Yuma. MCAS Yuma has access to 2.8 million acres of aviation and bombing ranges, transient training facilities and good flying weather. It also serves as a base of operations supporting several tenant units.

#### **B.** Emission Sources

NAICS Code 481 covers boilers, heaters, internal combustion engines (ICEs), abrasive blast cabinets, degreasers and parts washers, open burning, booth and non-booth surface coating, remediation systems, welding, jet engine test cells, gear arrestors, mobile and offroad sources, demolition and renovation, and other miscellaneous equipment. MCAS Yuma operates 24 hours per day, 365 days per year.

#### III. LEARNING SITE EVALUATION

In accordance with ADEQ's Environmental Permits and Approvals near Learning Sites Policy, the Department is required to conduct an evaluation to determine if any nearby learning sites would be adversely impacted by the facility. Learning sites consist of all existing public schools, charter schools and private schools the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

There are 10 learning sites within two miles of this facility. The Department conducted a learning site evaluation at Permit No. 53234 and determined that the facilities operation would not have any adverse effect on the learning sites in the vicinity of this facility. For this renewal Permit No. 87288, the emission increases are significantly below the permitting exemption thresholds. Therefore, a learning site re-evaluation does not apply.

#### IV. COMPLIANCE HISTORY

**A.** Physical Inspections and Compliance Certification Review

During the five-year permit term that MCSA Yuma operated under Permit No. 63582, this facility had three (3) physical inspections and eight (8) compliance certification reviews.

## **B.** Excess Emissions and Permit Deviation Report Review

During the five-year permit term that MCSA Yuma operated under Permit No. 63582, this facility had, one (1) excess emission report review, and thirteen (13) deviation report reviews.

## 1. Excess Emission Report Review

## a. Inspection ID: 272648

On 10/12/2016 an underground power line servicing two sites located on the flight line failed. Generators had been used until the power line was repaired on 12/08/2016 as proposed and excess emissions were estimated. Total tons of estimated excess emissions: CO 0.21; NOx 0.99; PM 0.07. Additional information was requested to provide a root cause analysis of why the power line failed and a corrective action plan of how to prevent reoccurrence. On 12/12/2016 the additional information was received. On 03/13/2017 more additional document was received proving that the repairs to the underground power line servicing two sites were finished and verified.

#### 2. Deviation Report Review

#### a. Inspection ID: 357988, and 337815

It was reported that monthly visible emission surveys were missed for the engine test cells. The EU 525/T-10 test cell was down for maintenance from November 2019 to part of May 2020, and visible emissions monthly surveys were not performed in September and October of 2018, January and February of 2019, and June and July of 2020. The EU 524/T-26 (APU) test cell visible emissions monthly survey were not performed in September, November, and December in 2018; February and August in 2019, and February, March, April, May and July in 2020. The EU 578/T-36 test cell was operational this year when the EU 525/T-10 test cell was down for several months from fall 2019 through part of May 2020. During this time visible emission surveys were not completed in March, and May of 2020. The EU 526/F-5 test visible emission surveys were not performed in October 2018, January, February, June, and October in 2019, February, April, May and July in 2020.

The nature and cause of this deviation was due to personnel shortages/turnover, and the notification was during off shift or field work; and also due to COVID19 personnel or the communication process via telework was not readily available. This deviation was escalated to compliance with Case No. 193724.

## b. Inspection ID: 358044

It was reported that a leak repair was completed on June 3, 2020 and recharged with 100 lbs. of R-134a. Another follow-on leak check was due within 30 days (July 3, 2020) but was not completed until July 21, 2020. This deviation was due to COVID19 personnel or the communication process via telework was not readily available. The MCAS Environmental Department would continue to work with Supervisors and personnel with communication since COVID-19.

## c. Inspection ID: 357970, 357992, and 357994

These three deviations were for missed EPA Method 9 certification and late submittal of annual compliance certification due to COVID-19. Actions were taken to remedy the deviation as well as to prevent reoccurrence.

## d. Inspection ID: 337827, 337843, and 337861

In 2019 the SVEU catalyst oxidizer temperature logger recorded temperatures below 600 degrees F on March 11, 18, April 2, June 4 and July 2. Because of the data points on either side of the low readings were at 700 degrees F or above, it was believed that these were data anomalies. The Technical Support Document for the permit did not give any quality data or averaging criteria, so this deviation was submitted accordingly.

These three deviations were for the soil vapor extraction unit (SVEU). The SVEU catalyst oxidizer temperature logger failed to continuously record temperatures from August 2, 2018 through December 2018 (when the SVEU was operating) due to a battery failure and electrical problems. In March, April, June and July of 2019 the SVEU catalyst oxidizer temperature logger failed again to continuously record temperatures for totally 5 days and the cause was unknown. It was also reported that the June 2019 and August 2019 SVEU's VOC destruction rate was 80.62 percent and below the 90 percent requirement. Actions were taken to remedy the deviation as well as to prevent reoccurrence.

Note: The Soil Vapor Evaporation Unit was removed in November 2020. The soil cleanup project was completed.

#### e. Inspection ID: 337857, and 337863

These two deviations reported that the oil and filter changes were not completed annually as required for the following units: Emission Unit IDs 301, 302, 304, 319, 338, 339, 341, 349, 351, 352, and 354. Actions were taken to remedy the deviation as well as to prevent reoccurrence.

#### f. Inspection ID: 337876

This deviation was for a late follow up inspection for a repair completed on August 1, 2019 due to late internal submission of ODS leak record. Actions were taken to remedy the deviation as well as to prevent reoccurrence.

### g. Inspection ID: 337867

This deviation was for the late submittal of annual compliance certification due to personnel shortages/turnover. Actions were taken to remedy the deviation as well as to prevent reoccurrence.

#### **C.** Formal Enforcement Actions

#### 1. Case Number: 164275

A Notice of Correction (NOC) was issued to MCAS – Yuma on August 8, 2016, for a violation based on an inspection conducted on August 2, 2016 (Inspection ID: 264740). The violation was:

During the ADEQ inspection on August 1 & 2, 2016, the ADEQ inspectors observed emergency generator engines with hand-written dates on oil filter. The emergency generators located at Building 410, Unit 349, had an oil filter date of 10-23-14, Building 153, Unit 302, had an oil filter date of 2-11-14, Building 134, Unit 341, had an oil filter date of 10-15-14. Building 406, Units 339 & 338 had original oil filters and Vinnie Vanni, Mechanic, stated the engines manufacture date was February 2011 and the oil has never been changed since the unit was installed. The ADEQ inspectors requested the Facility Maintenance Department to provide the actual oil change dates and the Facility Maintenance Department was unable to retrieve documentation of actual oil changes on the engines inspected.

The facility's deadlines to achieve compliance were March 30, 2017. The facility responded on October 25, 2016. Compliance was documented and the NOC was closed on November 15, 2016.

#### 2. Case Number 193724

A Notice of Correction was issued to MCAS – Yuma on October 14, 2020, for a violation based on two deviation report reviews (Inspection ID: 337815 and 357988). According to Permit Deviation reports (Inspection ID: 337815 and 357988) submitted on November 18, 2019 and September 30, 2020, the source failed to conduct visible emissions observations for a total of twenty-eight (28) months between September of 2018 and July of 2020 for test cells covered by its operating permit (Emissions Units EU 525, EU 524, EU 526, and EU 578).

The facility's deadlines to achieve compliance were October 29, 2020. The facility responded on October 8 and 22, 2020. Compliance was documented and the NOC was closed on October 26, 2020.

#### V. EMISSIONS

The potential-to-emit (PTE) is calculated based on EPA AP-42, Air Emission Factor Guide to Air Force Stationary Sources, and the Navy's Aircraft Environmental Support Office (AESO) memorandum Report. The facility has a potential-to-emit (PTE) more than the significant thresholds of  $NO_X$  and VOC. The facility's PTE is provided in Table 1 below:

**Table 1: Potential to Emit (tpy)** 

Pollutant	Emissions from # 63582 (as amended by 74705)	Change in Emissions	Emissions	Permitting Exemption Threshold	Minor NSR Triggered?
$NO_X$	58.35	-0.07	58.28	20	No
$PM_{10}$	11.00	-2.44	8.56	7.5	No
PM <sub>2.5</sub>	11.17	-2.71	8.46	5	No
СО	32.23	-0.29	31.94	50	No
SO <sub>2</sub>	0.70	0	0.70	20	No
VOC	19.84	7.1	26.94	20	No
Pb	0.03	0.02	0.05	0.3	No
HAPs (Total)	7.68	0.18	7.86	N/A	No

The biggest change is in VOC emissions in this renewal permit from the last permit action. Two factors led to this change:

- 1. The VOC emission calculation methodology was changed from calculating the emissions from individual pieces of equipment to using the total amount of materials processed at the degreaser and parts cleaner operations.
- 2. A Parts Washer Strip Tank and a Parts Washer Rinse Tank were added to the degreaser and parts cleaner operation.

#### VI. VOLUNTARILY ACCEPTED EMISSION LIMITATIONS AND STANDARDS

The permit contains the following voluntary emission limitations and standards to avoid classification as a source that requires a Class I permit:

**A.** Internal Combustion Engines (ICEs) and Gear Arrester Engines

The facility has accepted voluntary operating hour limits for IC Engines and Gear Arrestor Engines. The emergency ICEs each has an operating limit of 500 hours annually. Those designated as flight line (FL) each has a 1000 hours limit annually. The gear arrester engines totally have a combined 1500 hours limit annually.

**B.** Booth Painting Surface Coating Operations

The facility has accepted a voluntary process rate limit of 2000 gal/yr for booth painting surface coating operations.

## **C.** Jet Engine Test Cells

The facility has accepted voluntary fuel operating limits for the jet engine test cells. For test cells 525/T-10, 524/T-26, and 578/T-36, they have a total operating annual limit of 381,000 gallons of F24 fuel. Test cell 526/F-5 has an operating annual limit of 74,000 gallons of F24 fuel.

## VII. APPLICABLE REGULATIONS

Table 2 identifies applicable regulations and verification as to why that standard applies. The table also contains a discussion of any regulations the emission unit is exempt from.

**Table 2: Applicable Regulations** 

Unit & year	<b>Control Device</b>	Rule	Discussion
Boilers, Heaters, Furnaces, and Infrared Heaters	NA	A.A C. R18-2-724	NSPS Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units is applicable to each steam generating unit for which construction, modification, or reconstruction commenced after June 9, 1989 and has a maximum design heat input capacity between 10 and 100 MMBtu/hr. The capacity of these boilers and heaters is below 10 MMBtu/hour. Hence, NSPS is not applicable. Therefore, A.A.C. R 18-2-724 - Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment is applicable.  NESHAP Subpart JJJJJJ defines 'Gasfired boiler' as any boiler that burns gaseous fuels and burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. The boilers at MCAS shall be using natural gas only. The hot water heaters at the facility are below 120 US Gallons capacity. Therefore, these are exempt from the requirements of NESHAP Subpart JJJJJJ.

Unit & year	<b>Control Device</b>	Rule	Discussion
Internal Combustion Engines, pre-2007	NA	A. A. C. R18-2-719  NESHAP Subpart ZZZZ	Applicability date for NSPS Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines is April 2006 for compression ignition ICEs. The NSPS is not applicable since these ICEs are manufactured before 2006. Therefore, Standards of Performance for Existing Stationary Rotating Machinery are applicable.  In accordance with 40 CFR 63, Subpart ZZZZ the ICEs identified here are 'existing emergency engines' at an area source. Therefore, requirements of NESHAP Subpart ZZZZ are applicable.
Internal Combustion Engines, 2007 and newer	NA	NSPS Subpart IIII NESHAP Subpart ZZZZ	NSPS Subpart IIII is applicable to ICEs manufactured after April, 2006. This Subpart is applicable to these ICEs.  These are 'New Engines' under NESHAP Subpart ZZZZ. Requirements of NESHAP ZZZZ are met by their meeting the requirements of NSPS Subpart IIII.
Gear Arrestor Engines, 2013	NA	A. A. C. R18-2-719  NESHAP Subpart ZZZZ	The engines for gear arrestors were replaced with engines manufactured in the year 2013 since the manufacturer could not replace the old engines. The new engines are the replacement engines for the engines of pre 2001 and are exempt from EPA and CARB standards.  In accordance with 40 CFR 63, Subpart ZZZZ the ICEs identified here are 'existing emergency engines' at an area source. Therefore, requirements of NESHAP Subpart ZZZZ are applicable.

Unit & year	<b>Control Device</b>	Rule	Discussion
Engine Test Cells, Welding, and Parts Washer		A.A.C. R18-2-730	This standard for unclassified equipment applies to engine test cells, welding, and parts washer.
	NA		NESHAP Subpart T - National Emission Standards for Halogenated Solvent Cleaning is not applicable because MCAS Yuma does not use halogenated solvents in their parts washers or paint stripping equipment.
			NESHAP Subpart PPPPP - National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands is not applicable because MCAS Yuma is not a major HAP source.
Spray Painting Activities	Filters	A.A.C. R18-2- 727	This standard applies to spray painting activities.
			NESHAP Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products is not applicable because MCAS Yuma is not a major HAP source.
			NESHAP Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources is not applicable because MCAS Yuma is included in the Armed Forces of the United States and exempt from this subpart per §63.11169.d(1) and d(2).
Fugitive dust sources	Water Trucks, Dust Suppressants	A.A.C. R18-2 Article 6 A.A.C. R18-2- 702	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2- 702 A.A.C. R-18-2- 726	These standards are applicable to any abrasive blasting operation.

Unit & year	<b>Control Device</b>	Rule	Discussion
Spray Painting	Enclosures	A.A.C. R18-2- 702 A.A.C. R-18-2- 727	These standards are applicable to any spray painting operation.
Demolition/renovation Operations	N/A	A.A.C. R18-2- 1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.

## VIII. PREVIOUS PERMIT REVISIONS AND CONDITIONS

## **A.** Previous Permit Revisions

Table 3 provides a description of the permit revisions made to Permit No. 63582 during the previous permit term.

Table 3: Permit Revisions to Permit No. 63582

Permit Revision No.	Permit Revision Type	Brief Description	
64898	Significant Revision	Revising the destruction efficiency of the Soil Vapor Extraction Unit	
66475	Minor Revision	Replacement of 3 Water heaters, 2 Boilers, correction to Water heater #126 rated capacity, addition of a Water heater and addition of ceiling mounted IR heaters	
69165	Minor Revision	Remove Emergency Generator #308; remove temporary Booth Coating #506; install Booth Coating #599; install Parts Washer #509; and correct the serial number noted on the equipment list for Parts Washer #596	
69622	Minor Revision	Remove Blast Cabinet 502 and install Blast Cabinet 513	
		Addition of the following equipment:  2 Tier 4 EPA-certified emergency generators each rated at  201 hp; 2 water heaters rated at 0.10 MMBtu/hr and  0.0751 MMBtu/hr; and One boiler rated at 0.40 MMBtu/hr	
71834	Minor Revision	Removal of the following equipment:  2 boilers rated at 0.48 MMBtu/hr and 0.627 MMBtu/hr; 3 water heaters rated at 0.0751 MMBtu/hr, 0.040 MMBtu/hr and 0.040 MMBtu/hr; 2 Blast cabinets; 4) One parts washer and 5) One Welder SMAW	
74705	Minor Revision	Replace three (3) 0.21 MMBtu natural gas-fired boilers with three (3) 0.20 MMBtu natural gas-fired boilers and remove one 30 gallon parts washer and add three (3) new parts washers.	

# **B.** Changes to Current Renewal

Table 4 addresses the changes made to the sections and conditions from Permit No. 63582 as amended by 74705:

**Table 4: Previous Permit Conditions** 

Table 4. It vious I clinic conditions				
Section	Determination		on	Comments
No.	Added	Revised	Deleted	Comments
Att. "A"		X		General Provisions:
Att. A		Λ		Revised to represent the most recent template language
Att. "A"				Compliance Certification:
Section		X		The reporting period covered by annual compliance
VII.A				certification was revised per MCAS – Yuma's request.
Att. "B"		v		Facility Wide Requirements:
Section I		X		Revised to represent the most recent template language
Att. "B"				Requirements For Soil Vapor Evaporation Unit:
			X	Deleted because the SVEU was removed in November
Section V				2020 and the soil cleanup project was completed.
Att. "B"		X		Fugitive Dust Requirements:
Section VII		Λ		Revised to represent the most recent template language
Att. "B"				Other Periodic Activities:
Section		X		
VIII				Revised to represent the most recent template language
		_		Equipment List:
Att. "C"		X		Revised to reflect the most recent equipment operating at
Au. C		Λ		the facility and to include equipment information
				provided.

## IX. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Table 5 contains an inclusive but not an exhaustive list of the monitoring, recordkeeping and reporting requirements prescribed by the air quality permit. The table below is intended to provide insight to the public for how the Permittee is required to demonstrate compliance with the emission limits in the permit.

Table 5: Permit No. 87288

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Boilers Heaters, Furnaces, and Infrared Heaters	PM	Not exceeding $E=1.02$ $Q^{0.769}$ where $E=$ the maximum particulate emission rate in pounds-mass per hour, and $Q=$ the heat input in million Btu per hour.  Opacity $\leq 15\%$	EPA Reference Method 9 observation	Keep records of fuel supplier certifications	Report all six-minute periods in which the opacity of any plume or effluent from the equipment exceeds 15 percent
Emergency ICEs	For all engines, operating hours	Not operate more than the hours listed in the Equipment List, Attachment "C" in any rolling 12-month period		Keep records of the rolling 12-month total hours of operation of each engine to demonstrate compliance with the hourly limitation	
and Gear Arrestor Engines	For engines not subject to NSPS	Not exceeding $E = 1.02$ $Q^{0.769}$ where $E = the$ maximum particulate emission rate in pounds-mass per hour, and $Q = the$ heat input in million Btu per hour.	Conduct monthly survey of visible emissions	Maintain a record of the daily lower heating value of the fuel fired in the engines	

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
		Opacity ≤ 40% for any period greater than 10 consecutive seconds			
	For engines not subject to NSPS	≤ 1.0 lb/MMBtu		Keep records of fuel supplier certification	
	For engines subject to NSPS Subpart IIII	Table 1 and 4 40 CFR Part 60 Subpart IIII, New Non-road engines in 40 CFR 60.4202	For engines 2007 and later, purchase an engine certified to the emission standards in 40 CFR 60.4205(b). For modified or reconstructed engines, purchase an engine certified to the emission standards in 40 CFR 60.4204(e) or 4205(f); or conduct an initial performance test.	Maintain a copy of engine certification or other documentation demonstrating that the engine complies with the applicable standards. Record the time of operation of the engine and the reason the engine was in operation during that time. Keep records of fuel supplier specifications	Submit performance test reports if applicable.
	For engines subject to NESHAP			Keep records of the hours of operation of the emergency ICE that is recorded through the non-resettable hour meter. Keep records of the	Submit all reports required along with the annual compliance certification.

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
	Subpart ZZZZ			parameters that are analyzed and the results of the oil analysis, if any, and the oil changes for the engine. For existing emergency ICE subject to management practices in Attachment "B" Condition Error! Reference source not found., keep records of the maintenance conducted on the ICE	
Test Cells, Welding Machines, and Parts Washers	Fuel Usage Limitation	Use no more than 381,000 gallons of F24 fuel in Engine Test Cells ID #s 524, 525, and 527 in any rolling 12-month period; and use no more than 74,000 gallons of fuel in Engine Test Cell ID #526 in any rolling 12-month period.		Keep records of the rolling 12-month total usage of F24 in Test Cell #s 524, 525, and 527; and keep records of the rolling 12-month total usage of F24 in Test Cell #526.	
	PM	For sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, PM not exceed E = 4.10 P <sup>0.67</sup> ; and for sources having a process weight rate of			

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
		60,000 pounds per hour (30 tons per hour) or less, not exceed E = 55.0 P <sup>0.11</sup> - 40, where E = the maximum allowable particulate emissions rate in pounds-mass per hour and P = the process weight rate in tons-mass per hour.  Opacity ≤ 20%	Conduct monthly visible observation		
	SO <sub>2</sub>	≤ 600 ppm	survey.		
	NOx	≤ 500 ppm			
Facility-Wide Hazardous Air Pollutant Requirements	HAPs	Total HAPs ≤ 22.5 tons in any 12-month rolling period; single HAP ≤ 9 tons tons in any 12-month rolling period		Record information of the HAP material used; keep records of the daily usage of all solvents, paints, or of other HAP-containing materials; on a monthly basis, determine the facility-wide total of HAP- containing materials used; on an annual basis, perform mass balances for all	the records required to

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
				HAP- containing materials.	
Fugitive Dust	PM	Opacity ≤ 40%	A Method 9 observer is required to conduct a monthly survey of visible emissions.	Record of the dates and types of dust control measures employed, and if applicable, the results of any Method 9 observations, and any corrective action taken to lower the opacity of any excess emissions.	
Abrasive Blasting	PM	Opacity ≤ 20%		Record the date, duration and pollution control measures of any abrasive blasting project.	
Spray Painting	VOC	Opacity ≤ 20%  Control 96% of the overspray		Maintain records of the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray painting project.	
Demolition/ Renovation	Asbestos			Maintain records of all asbestos related demolition or renovation projects including the "NESHAP Notification for Renovation and Demolition Activities"	

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
				form and all supporting documents	

## X. LIST OF ABBREVIATIONS

A.A.C	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
MMBtu/hr	Million British Thermal Units per Hour
CARB	
CFR	
	Carbon Monoxide
EPA	Environmental Protection Agency
ft	Feet
HAP	Hazardous Air Pollutant
np	Horsepower
nr	Hour
IC	Internal Combustion
ά <b>W</b>	Kilowatt
b	Pound
MW	Megawatts
NAICS	
NATO	North Atlantic Treaty Organization
NO <sub>X</sub>	Nitrogen Oxides
NSPS	
NESHAP	National Emission Standards For Hazardous Air Pollutants
Pb	Lead
PM	Particulate Matter
PM <sub>10</sub> P	articulate Matter less than 10 µm nominal aerodynamic diameter
PM <sub>2.5</sub> Pa	articulate Matter less than 2.5 µm nominal aerodynamic diameter
PTE	Potential to Emit
SO <sub>2</sub>	Sulfur Dioxide Significant Impact Levels
ГРҮ	Tons per Year
VOC	Volatile Organic Compound
Vr	Vaar